

### **REMARKS**

Claims 3-16 and 18-33 are pending. Claims 25 and 27-31 stand withdrawn from consideration as drawn to a non-elected invention. Claims 3-16, 18-26, 32 and 33 stand rejected.

Claims 3, 15, 16, 26, 32, and 33 are amended. Support for the amendments can be found, *inter alia*, in paragraph [0061] of the Specification and in Figures 5, 8, 8A, and 9.<sup>1</sup> No new matter is introduced.

Applicant respectfully submits that the amendments place the application in condition for allowance or, in the alternative, in better condition for appeal. Moreover, Applicant respectfully submits that the amendments are responsive to suggestions raised in the Examiner's Response to Arguments (Office action, pp.9-12), and as such do not require further search or consideration. Accordingly, Applicant respectfully requests entry of the amendments.

Applicant has reviewed the Office action, including the Examiner's remarks and the references cited therein. Applicant thanks the Examiner for reconsidering and withdrawing certain rejections of claim 26. Applicant submits that the following remarks are fully responsive to the Office action, and that all pending claims are patentable over the cited references.

### **Summary of the Interview**

Applicant thanks the Examiner for the courtesy of a telephonic interview on November 23, 2009 ("the Interview"). Pursuant to MPEP § 713.04, Applicant provides the following summary of the substance of the Interview.<sup>2</sup>

Applicant and the Examiner discussed the Examiner's view that "the term 'sandwiched' is more limiting than 'interposed'." Office action, p.10. Applicant agreed to consider adopting the Examiner's suggestion to explicitly recite that the electrode is

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<sup>1</sup> Paragraph references are to the application as published. United States patent application publication no. 2004/0143256 (Jul. 22, 2004).

<sup>2</sup> This summary is being prepared in advance of receiving a PTOL-413 Interview Summary. Applicant reserves the right to amend or update this summary after receipt of the Interview Summary.

“sandwiched” between two structures, rather than “interposed” between two surfaces. The Examiner indicated that such an amendment would overcome the rejection in view of United States patent no. 5,643,197 (“Brucker”).

With respect to United States patent no. 6,837,886 (“Collins”), and in particular with respect to Figure 20E of Collins, the Examiner requested Applicant’s views as to whether shroud 137 sandwiches electrode 28. Applicant is of the opinion that Collins’s electrode 28 is not sandwiched by shroud 137. The Examiner thought Applicant’s view was most likely the correct view of Collins, but indicated further consideration of Collins would be necessary.

### **Rejections Under 35 U.S.C. § 102**

#### **Claims 3-13, 15, 16, 18, and 33**

The Examiner rejects claims 3-13, 15, 16, 18, and 33 under 35 U.S.C. § 102 as anticipated by Brucker. To be anticipatory, a single prior art reference must explicitly or inherently teach each and every element of the claimed invention. MPEP § 2131 (citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987)). Applicant respectfully submits that Brucker fails to meet this standard.

As amended, claim 33 recites “at least one braided electrode *sandwiched between* the inner tubular structure and the outer tubular structure.” Claim 33 (emphasis added). That is, in some embodiments of the invention,

the braided electrode 42 is secured within the ablation catheter 38 between an inner surface and an outer surface. In one implementation the inner surface and the outer surface are both generally tubular, flexible, resilient structures with the diameters of the two tubular structures configured so that *the outer surface will fit fairly tightly over the inner surface* or be bonded to the inner surface.

Specification, ¶ [0061] (emphasis added); see *also* Figs. 8, 8A, and 9. Even where a portion of the outer surface is removed to define a braid window, “a portion of the braided electrode remains sandwiched between the inner 78 and outer 80 surface to secure the electrode in place.” *Id.*, ¶ [0062].

In the Office action, the Examiner notes that “there is nothing in the claims that requires the electrode to be ‘sandwiched’, and that the term ‘sandwiched’ is more limiting than ‘interposed’.” Office action, p.10. While Applicant respectfully disagrees with the Examiner’s conclusion regarding the meanings of “sandwiched” and “interposed,” the amendments to claims 26, 32, and 33 herein adopt the Examiner’s implicit suggestion to incorporate the term “sandwiched” into the claims in the interest of advancing prosecution.

As discussed at length in previous communications, Brucker teaches a braided electrode on the outer surface of the catheter. Brucker, 8:15-16, Figs. 15 and 16. As discussed during the Interview, Brucker does not appear to teach that any portion of the electrode is sandwiched between inner and outer tubular structures as recited in claim 33. Indeed, Brucker does not appear to teach or suggest the claimed inner and outer tubular structures at all.

Accordingly, Brucker does not anticipate claim 33. Claims 3-13, 15, 16, and 18 depend from claim 33 and are novel over Brucker for at least the same reasons that claim 33 is novel over Brucker. Applicant therefore respectfully requests reconsideration and withdrawal of the rejection of claims 3-13, 15, 16, 18, and 33 over Brucker.

Claims 3-16, 18, 26 and 33

The Examiner rejects claims 3-16, 18, 26 and 33 under 35 U.S.C. § 102 as being anticipated by Collins. Applicant respectfully disagrees.

As amended, claim 26 recites an ablation catheter that includes “fixed braided electrode means . . . *sandwiched between* the inner tubular structure and the outer tubular structure . . . .” Claim 26 (emphasis added). As discussed above, claim 33 contains a similar recitation.

As the specification makes clear, the fit between the inner and outer tubular structures is tight so as to fixedly secure the braided electrode therebetween. *E.g.*, Specification, ¶ [0061]; see *also* Webster’s II New College Dictionary 979 (2001)

(defining “sandwich” as “[t]o insert (one thing) *tightly* between two other things”) (emphasis added). Such an arrangement is neither taught nor suggested by Collins.

In contrast to the present invention, Collins teaches a braided conductive member 28 concentrically disposed about an inner member 22. Collins, 4:67-5:3. In some embodiments, Collins teaches a shroud (e.g., 137) covering at least a portion of the conductive member 28. E.g., *id.*, 13:44-46, Figs. 20A-20E. Collins’s shroud, however, is merely external to conductive member 28—that is, it is only on *one side* of the conductive member 28. E.g., *id.*, 14:26-27. Rather than also being shrouded, the inner side of conductive member 28 faces inner member 22. E.g., *id.*, Fig. 5. Collins further teaches that conductive member 28 can “expand radially to assume various diameters and/or a conical shape.” *Id.*, 5:6-9 and Figs. 2-5.

Thus, conductive member 28 does not fit tightly between two portions of shroud 137 or between shroud 137 and inner member 22. As such, it is not “sandwiched between” two portions of shroud 137 or inner member 22 and shroud 137 within the meaning of claims 26 and 33.

For at least the foregoing reasons, Applicant respectfully submits that Collins does not teach each and every element of, and therefore does not anticipate, claim 26 or claim 33. Claims 3-16 and 18 depend from claim 33 and are novel for at least the same reasons as claim 33 is novel. Applicant therefore respectfully requests reconsideration and withdrawal of the rejection of claims 3-16, 18, 26, and 33 in view of Collins.

### **Rejections Under 35 U.S.C. § 103**

#### **Claims 3-13, 15, 16, 18, 32, and 33**

The Examiner rejects claims 3-13, 15, 16, 18, 32, and 33 under 35 U.S.C. § 103 as obvious over United States patent no. 6,078,830 (“Levin”) in view of Brucker. Applicant respectfully disagrees.

Though the prior art references need not teach or suggest each and every limitation of a claim for that claim to be obvious, Applicant contends that the differences between the rejected claims and the references cited are sufficiently great so as to

render the claimed invention non-obvious to one of ordinary skill in the art at the time the invention was made. MPEP § 2141 (“[T]he focus when making a determination of obviousness should be on what a person of ordinary skill in the pertinent art would have known at the time of the invention, and *on what such a person would have reasonably expected to have been able to do in view of that knowledge.*”) (emphasis added). In particular, as discussed in further detail below, Applicant respectfully submits that one of ordinary skill in the art would not have learned the claimed invention from the asserted references, at least because the asserted references do not teach or suggest each and every element of the claimed invention.

The shortcomings of Brucker with respect to claim 33 are discussed at length above. Similar to claim 33, claim 32 recites “at least one braided electrode *interposed in a fixed position* between the inner tubular structure and the outer tubular structure” of the catheter shaft. Claim 32 (emphasis added). Thus, the teachings of Brucker are similarly deficient with respect to claim 32. Like Brucker, Levin fails to teach or suggest the claimed inner and outer tubular structures between which the braided electrode is positioned. See, e.g., Levin, Figs. 3 and 4 (depicting electrodes molded into the catheter wall).

Thus, Applicant respectfully submits that the claimed structure is nowhere found in the asserted references. As such, claims 32 and 33 are substantially different from, and therefore non-obvious over, the asserted combination of references. Claims 3-13, 15, 16, and 18 are dependent on claim 33 and are non-obvious for at least the same reasons that claim 33 is non-obvious. Applicant accordingly respectfully requests reconsideration and withdrawal of the rejection of claims 3-13, 15, 16, 18, 32, and 33 over Levin and Brucker.

#### Claims 14 and 26

The Examiner rejects claims 14 and 26 under 35 U.S.C. § 103 as obvious over Levin in view of Brucker and Collins. Applicant respectfully disagrees.

Claim 14 depends from claim 33. Applicant has discussed at length above the substantial differences between claim 33 and the cited references. Applicant

accordingly respectfully submits that one of ordinary skill in the art would not have learned the claimed invention, including, *inter alia*, “at least one braided electrode sandwiched between the inner tubular structure and the outer tubular structure” from the asserted references. Likewise, none of the asserted references teaches or suggests “fixed braided electrode means . . . sandwiched between the inner tubular structure and the outer tubular structure” as recited in claim 26.

In view of the foregoing remarks, Applicant respectfully submits that claims 14 and 26 are substantially different from, and non-obvious over, the combination of Levin, Brucker, and Collins. Accordingly, the rejection of claims 14 and 26 should be reconsidered and withdrawn.

#### Claims 19-23

The Examiner rejects claims 19-23 under 35 U.S.C. § 103 as obvious over Levin and Brucker in view of United States patent no. 6,120,500 (“Bednarek”). Applicant respectfully disagrees.

Claims 19-23 depend from claim 33. The shortcomings of Levin and Brucker with respect to claim 33 are discussed at length above and are not cured by the addition of Bednarek. Indeed, the Examiner relies on Bednarek only for its teaching of a control wire. Office action at 6. It follows that claims 19-23 are substantially different from, and therefore non-obvious over, the combination of Levin, Brucker, and Bednarek. Applicant accordingly respectfully requests reconsideration and withdrawal of the rejection of claims 19-23 under 35 U.S.C. § 103.

The Examiner also rejects claims 19-23 under 35 U.S.C. § 103 as obvious over Brucker or Collins in view of Bednarek. Applicant respectfully disagrees.

Applicant has already addressed the shortcomings of the combination of Levin, Brucker, and Bednarek with respect to claims 19-23. Removing Levin and substituting Collins for Brucker does not address these shortcomings. Applicant therefore submits that claims 19-23 are substantially different from, and therefore non-obvious over, the asserted combination of Brucker or Collins in view of Bednarek. Reconsideration and withdrawal of the rejection of claims 19-23 is respectfully requested.

Claim 24

The Examiner rejects claim 24 under 35 U.S.C. § 103 as obvious over Levin, Brucker, and Bednarek in view of United States patent no. 6,080,151 ("Swartz"). Applicant respectfully disagrees.

Claim 24 depends from claim 23. The shortcomings of Levin, Brucker, and Bednarek with respect to claim 23, discussed at length above, are not cured by the addition of Swartz. Indeed, the Examiner relies on Swartz only for its teaching of "provid[ing] electrode leads through a second lumen to keep the wires separate from the fluid delivery lumen." Office action at 7. It follows that claim 24 is substantially different from, and therefore non-obvious over, the combination of Levin, Brucker, Bednarek, and Swartz.

The Examiner also rejects claim 24 under 35 U.S.C. § 103 as obvious over Collins or Brucker in view of Bednarek and Swartz. Applicant respectfully disagrees.

Applicant has already addressed the shortcomings of the combination of Levin, Brucker, and Bednarek with respect to claim 23. Removing Levin and substituting Collins for Brucker does not address these shortcomings. Nor does the addition of Swartz address these shortcomings. Applicant accordingly respectfully submits that claim 24 is substantially different from, and therefore non-obvious over, the asserted combination of Collins or Brucker in view of Bednarek and Swartz.

Applicant accordingly respectfully requests reconsideration and withdrawal of all rejections of claim 24 under 35 U.S.C. § 103.

Claim 32

The Examiner rejects claim 32 under 35 U.S.C. § 103 as obvious over Brucker or Collins in view of Levin. Applicant respectfully disagrees.

Applicant has already addressed the shortcomings of the combination of Brucker and Levin with respect to claim 32. Applicant has also addressed the shortcomings of Collins with respect to claim 32. In short, none of the asserted references teaches the claimed arrangement of "at least one braided electrode interposed in a fixed position

between the inner tubular structure and the outer tubular structure” of the catheter shaft. Thus, Applicant respectfully submits that claim 32 is substantially different from, and therefore non-obvious over, the asserted combination either Brucker or Collins in view of Levin. Reconsideration and withdrawal of the rejection of claim 32 is respectfully requested.



**CONCLUSION**

In view of the foregoing remarks, Applicant respectfully submits that the application is in condition for allowance, and requests that all rejections be withdrawn, that all pending claims be allowed, and that the application be passed to issue. If, for any reason, the Examiner finds the application to be in other than condition for allowance, the Examiner is invited to contact the undersigned in an effort to resolve any matter still outstanding before issuing another action.

Applicant submits that no extension of time is necessary for this paper to be considered timely. Should any extension of time be deemed necessary, Applicant hereby petitions therefor under 37 C.F.R. § 1.136.

Authorization is hereby granted to charge any fees due with the filing of this document, including any fees for any extensions of time deemed necessary, to Deposit Account No. 50-1129 with reference to Attorney Docket No. 0B-044401US/82410-0053.

Respectfully submitted,

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